THE DECISIVE STEP: INCORPORATION OF DECEPTION INTO TACTICAL MISSION PLANNING

A MONOGRAPH
BY
Major Michael A. Scully
Infantry



School of Advanced Military Studies United States Army Command and General Staff College Fort Leavenworth, Kansas

First Term AY 97-98

Approved for Public Release Distribution is Unlimited

19980324 103

DTIC QUALITY INSPECTED 3

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data source gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of tallection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jeffers Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

3. REPORT TYPE AND DATES COVERED 1. AGENCY USE ONLY (Leave blank) 2. REPORT DATE MONOGRAPH 5. FUNDING NUMBERS 4. TITLE AND SUBTITLE THE DECISIVE STEP: INCORPORATION OF DECEPTION FATO TACTICAL MISSIUN PLANNING

6. AUTHOR(S) MAJOR MECHAEL A. SCULLY

Fort Leavenworth, Kansas 66027

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 8. PERFORMING ORGANIZATION REPORT NUMBER School of Advanced Military Studies Command and General Staff College

10. SPONSORING/MONITORING 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) AGENCY REPORT NUMBER Command and General Staff College Fort Leavenworth, Kansas 66027

12b. DISTRIBUTION CODE 12a. DISTRIBUTION/AVAILABILITY STATEMENT 1- LTC WILLIAM HEWITT, CTAC APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED.

13. ABSTRACT (Maximum 200 words)

11. SUPPLEMENTARY NOTES

SEE MONOGRAPH ATTACHED

15. NUMBER OF PAGES 14. SUBJECT TERMS 56 TOTAL TACTICAL DECEPTION 16. PRICE CODE UMBRELLA OF DECEPTION 20. LIMITATION OF ABS SECURITY CLASSIFICATION 17. SECURITY CLASSIFICATION 18. SECURITY CLASSIFICATION OF THIS PAGE OF ABSTRACT OF REPORT UNLIMITED UNCLASSIFIED UNCLASSIFIED UNCLASSIFIED

SCHOOL OF ADVANCED MILITARY STUDIES MONOGRAPH APPROVAL

Major Michael A. Scully

Title of Monograph: The Decisive Step: Incorporation of Deception into Tactical

Mission Planning

Approved by:	
LTC William D. Hewitt, MA, MS	Monograph Director
COL Danny M. Davis MA, MMAS	Director, School of Advanced Military Studies
Philip J. Brookes, Ph.D.	Director, Graduate Degree Program

Accepted this 18th Day of December 1997

ABSTRACT

The Decisive Step: Incorporation of Deception into Tactical Mission Planning, by MAJ Michael A. Scully, USA, 41 pages.

Planning and executing deliberate deception is critical to an Army unit's success on today's battlefield as well as the battlefield of the future. Informational Warfare makes the concept of obscuration or concealment of tactical operations extremely difficult, if not impossible. Military doctrine, both at the operational and tactical levels, discusses this dilemma, and outlines the necessity for deception in the planning process.

Yet, U.S. Army units seem to be lulled into a belief that future adversaries will not possess informational warfare technology, and thus conduct planning as if they are invincible to the detection of opposing forces. Of greater significance is the fact that the typical operations order at tactical level seldom mentions the role or intent of deception as a means to achieve a given endstate. Reasons for failure to consider deception are many, ranging from lack of training about deception to a belief that tactical units do not possess the assets needed to conduct such operations. As a result, deception becomes an after-thought, with commanders placing little emphasis on the planning or execution of such operations.

In reality, deception should not be divorced from the base operation, but rather an integral part of the operations order and commander's intent that focuses efforts against that individual (often the OPFOR commander) that is most likely to be influenced by the gamut of deception techniques. Deception provides the enemy a picture of what you want him to see, lulling him into a false sense of security or advantage. This "big lie" may lead the OPFOR to take a desired course of action, intimidate him in commitment of a chosen action, or confuse him, causing a delay in a decision.

Thus, deception should be an integral part of the operations order, driven by commanders in their initial guidance to the staff. The deception mission statement and "story" should be integrated as part of the execution paragraph of the order, and nested with deception planning at higher headquarters. With training and emphasis by leaders, such an action will become second-nature to planners, and prove extremely beneficial to commanders responsible for maneuver warfare now and into the 21st Century.

TABLE OF CONTENTS

I. Introduction	Page
II. The "Umbrella" of Deception Defined	3
Perception Management	9
Linkage to OPSEC	
Linkage to PSYOPS	12
A Better Definition?	13
III. Precedent in Historical Documents.	15
WWII	16
Post-World War II	19
Post-Vietnam to Present	22
IV. Implementing Deception	27
Proposed Format to Use	28
Present Implications	
Future Implications	35
V. Conclusion.	39
ANNEX -Operations Order Format Integrating Deception	41
DIAGRAMS:	
Figure 1, Umbrella of Deception.	5
Figure 2, Deception Considerations in the Mission Analysis Process	29
Figure 3, Deception Planning and Data Requirements	
Figure 4, Format For Integrating Deception in the Operations Order	32

INTRODUCTION

The topic of deception is discussed in volumes of books, doctrinal manuals, periodicals, and briefings. Theorists from ages past espoused the wisdom of applying it to virtually every aspect of military battle. Opposing forces in training scenarios throughout the Army incorporate deception into the fundamental structure of their combat planning. Reviews fielded from the Combat Training Centers recognize deception as an effective means of gaining an advantage over an adversary. Deception is certainly not a new concept, and the amount of information currently available on deception could lead a researcher to conclude that there is nothing of further significance to be discussed or debated on the subject. As Sun Tzu wrote almost 2500 years ago:

Warfare is the Way (Tao) of deception. Thus, although [you are] capable, display incapability to them. When committed to employing your forces, feign inactivity. When [your objective] is nearby, make it appear as if distant; when far away, create the illusion of being nearby. 1

The lesson seems clear: Deception is truly a critical component of warfare, and thus should be recognized by leader and follower alike as an integral part of planning at every level of the military structure.

Yet, despite the abundance of material on this subject, numerous authoritative training reports cite that deception consistently takes a minor position in the overall planning scheme, especially at the tactical level. The logic for this situation is difficult to understand, given the apparent benefit deception affords to those military units that properly plan and implement deception. Many leaders generally recognize its importance, but fail to accept deception as a vital aspect of planning for military operations. They view deception as having no real intrinsic value, but rather an adjunct to a base plan that needs refinement in order to achieve some aspect of surprise. But, if surprise can be considered a decisive factor on all levels of war, then deception would

seem to be a valuable tool at the disposal of the commander seeking to achieve that surprise.²

The 1997 version of Field Manual 101-5, Staff Organization and Operations, dedicates several appendices to discussing deception and clarifying its utility. Field Manual 90-2, Battlefield Deception, is arguably the premier Army manual on deception operations, and has been available to Army units for a number of years. There is no shortage of sources on deception, and the rationale for conducting it seems solid. Unfortunately though, observations from training centers continue to note that deception remains an afterthought in the planning process of far too many tactical level units.

Why is this the case, when so many authorities believe in the importance of deception? Perhaps, the reason is as clear as that proposed by Major Jack H. Spencer, a graduate of the School for Advanced Military Studies (SAMS) when he wrote "Deception does not win battles, campaigns, or wars. At best it gains an advantage for the deceiver that may contribute to success. No component is more obscure than deception. It is theoretically regarded as a basic element of warfare." The subtle nature of deception may downplay its impact in war, leading to a belief that deception has no tangible structure that facilitates implementation into combat orders.

Or, perhaps leaders in units fail to fully appreciate how deception has played a vital role in the outcome of military battles over the years, believing that advanced technology has obsolesced historical precedent. There is little doubt that the technology of the Information Operations age and the associated exploitation of the electromagnetic spectrum certainly presents new and exciting opportunities for planners and leaders to expand their vision of the battlefield. Despite the rapid tempo in the average military unit, leaders need to devote time to study history. All too often, though, such dedicated time falls low in priority to field training and deployments, aspects that are indeed important to soldiers at all levels.

Another problem, noted in a study conducted by the Army Research Institute (ARI), states that Field Manual 90-2 outlines "what" needs to be done, but does not explain "how." Deception knowledge or deception "science" is vague and poorly defined despite the Army doctrine. ARI notes weaknesses "in the areas of doctrine, planning tools and aids, procedures and operational concepts, materiel development, tactical development, and training aids. Put simply, tactics and tactical development of deception is lacking in current doctrine. "6

Yet, despite what reasons may exist for units' failure to capitalize on the advantages of deception planning, the time has come for this concept to become as familiar to military leaders as any single doctrinal topic in writing today. The current and future information environment complicates the battlefield to a point where a leader's ability to affect an adversary's command and control structure becomes a formidable but necessary challenge. Technology such as high-altitude reconnaissance aircraft and intelligence satellites will make deception implementation highly complex. As such, leaders must be knowledgeable on how deception can be planned and employed to induce enemy decision makers to take actions which are favorable to, and exploitable by, friendly combat operations. Deception must therefore evolve alongside the technology that will take the Army into the 21st Century, and be recognized as an integral part of the planning process at every level.

In order for leaders and planners to successfully implement the deception planning process, the military must take a decisive step to fully weave deception into the basic fabric of our current planning process. Doctrinal manuals, although providing important information on the use and placement of deception operations, fail to take the critical move toward incorporating deception into the 5-paragraph Operations Order, to include discussion of deception within the context of the Commander's Intent. If the true purpose for the Commander's Intent statement is, according to Field Manual 101-5, to express "what the force must do to succeed with respect to the enemy and the terrain and to the

desired end state", then deception seems to have a vital place within the intent statement. Such placement establishes the conditions for specific discussion of deception within subsequent, nested paragraphs in the body of the Tactical Operations Order.

Deception, when implemented with a variety of operational and communications security measures specified by the commander, would effectively work to "mislead the enemy decision maker into specific but erroneous courses of actions, actions that could be capitalized upon by friendly forces." Deception planning then becomes an essential task requiring consideration and action by staffs and subordinate units in mission analysis, and subsequently presented as a basic element of the Operations Order rather than an appendix for supplemental reference. Within such a framework, deception planning would rapidly become a critical component of every operations briefing, with an end state that leaders view deception as a significant combat multiplier to utilize against an adversary.

The noted military theorist Carl von Clausewitz stated "No human characteristic appears so suited to the task of directing and inspiring strategy as the gift of cunning."
Cunning and deception assume a symbiotic relationship, and leaders must understood them for what they can provide to the planning process. In the hands of leaders informed on the historical significance of deception, the visibility in current doctrine, and the precedent for use, deception does not complicate an already complex battlefield framework. Instead, it compliments the measures currently in place to achieve success in combat, and provides that edge that may be crucial to future commanders needing such an advantage. Deception, however, will remain but a word without bearing if not understood by leaders and planners, and ultimately given the priority it rightly deserves. As an important part of Army doctrine, leaders should view exploration of the topic of deception as a worthwhile venture, especially when considering deception as a fundamental aspect of Army planning.

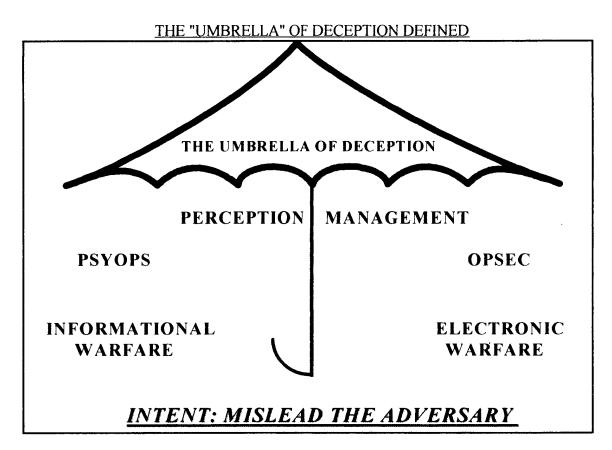


FIGURE 1, UMBRELLA OF DECEPTION

In analyzing why there seems to be an apparent disregard for deception planning, an excellent starting point would be a look at how deception is defined in the various doctrinal manuals. Is deception merely an application of ruses and feints, or is there a deeper, more significant meaning to the term? If deception is to become a mainstream process within our military structure, leaders and planners must first understand what exactly the term implies, and how the military envisions its use. Any ambiguity in definition or application could potentially frustrate planners into believing that any discussion of deception would be best left to academic institutions suited to exploring abstract or complex concepts.

A cursory study of the term "deception", or the "what" aspect, would seem to validate the simplicity and applicability of the word. The root word, "deceive" is defined in one dictionary as "to make a person believe what is not true; delude, mislead." This basic,

succinct definition does tend to capture the essence of the word, and portray in one line the ultimate intent for its use. It is a false picture, depicting one action or intent in order to cover a different action or intent. Put simply, deception is the story or action provided to an individual or groups of individuals that details a specific intention, capability, or disposition you want them to believe. ¹³

Not surprisingly, military definitions of the term do not vary greatly from that found in common dictionaries. At the Joint level, deception is viewed as

...actions executed to mislead foreign decision makers, causing them to derive and accept desired appreciations of military capabilities, intentions, operations, or other activities that evoke foreign actions that contribute to the originator's objectives. 14

Although specific to a military context, this definition also uses the term "mislead." The word does not imply a passive response, but rather one of deliberate action against another individual. This becomes significant when attempting to understand its application in operations as more than just a single event in time. Linked to this, deception becomes more than simply what you want the enemy to think, but more aligned with what you want the enemy to actually do. ¹⁵ Once initiated, deception becomes a concerted effort, consciously integrated into numerous facets of any given operation.

Various tactical-level manuals define deception in virtually the same manner. For the Army, deception is described in Field Manual 90-2 as "an operation or series of operations intended to mislead the enemy decision maker by applying either distortion, concealment, or some method of presenting a false picture of friendly capabilities." ¹⁶

Army manuals depict deception not in abstract but definable, specific terms that planners can grasp and employ. Deception becomes a means to lead adversaries to an action which favors the friendly situation. Terms such as demonstration, feint, and ruse are but techniques employable under an apparent "umbrella" called deception. The definition

does not imply the "how" to the process, but rather leaves room for the planner to employ his assets as appropriate to accomplish the intent of the process.

The "how" of the process does becomes important when researching the role that deception should play in today's Army. It is at this level that the root problem may exist in the Army's apparent failure to achieve full integration of deception into every operation. Field Manual 101-5-1, Operational Terms and Symbols, describes three means for a unit to conduct deception. They are delineated as physical, administrative, and technical means, and although different in description, ultimately arrive at the same goal: deceive the enemy to take a specific desired action. ¹⁷ A short discussion of these means should serve to further clarify the definitive nature of deception, and how leaders should understand its application.

Physical means imply using any available assets to either conceal or selectively reveal friendly operations to an adversary. This can mean employment of such objects as decoys or dummy equipment such as inflatable vehicles. However, it can also mean employment of such relatively routine procedures as reconnaissance, or conducting training missions that imply preparation for a future operation. Although requiring planning and coordination to be truly effective, these means are generally not resource intensive, as they can be customized to virtually any unit configuration in the Army. They only require commitment for use, and a good understanding of what is to be achieved by their employment.

Administrative means are as fundamental as protection of sensitive documents and use of camouflage, to employment of false radio nets to simulate increased activity in a particular area. These and associated measures become routine to many units, and are incorporated in battle drills and standard operating procedures (SOPs). When employed as a conscious effort to deceive enemy forces, administrative means become a powerful tool for leaders to fool the enemy as to friendly intentions. Conscious effort may imply knowing exactly who to direct these actions toward, the object of the deception. This

area gains greater significance under the Command and Control (C2) Attack/Protect concept of Information Operations, as leaders move toward the goal of incorporating deception into the planning cycle.

Technical means are more difficult to employ at the tactical level, as its use may require communication and electronic equipment not currently available to the tactical level unit. Further discussion of this means is contained in JCS Publication 1-DOD, but involves "techniques used to convey or deny selected information to a foreign power through the deliberate radiation, reradiation, alteration, absorption, or reflection of energy; the emission or suppression of chemical or biological odors; and the emission or suppression of nuclear particles." 18

One final aspect of defining deception is the "why", or the ultimate purpose for planning and conducting such operations. Derivations from the various definitions of deception seem to imply that leaders ultimately use battlefield deception as a means of 1) slowing or altering the enemy's ability or desire to respond to a given situation, 2) deceiving the enemy as to the exact location of the main effort of an operation, and 3) confusing the adversary by consistently doing what the adversary least expects. Military manuals may vary in content and verbiage, but the essence of the "why" of deception remains constant: Leaders conduct deception as a means to gain an added advantage over the enemy, which can be exploited at the chosen time and location.

Defining deception means more than simply looking to a document for words or description. It is internalizing the process, understanding how it applies to a particular unit for a specific mission. Deception is not mystical or vague; it is a quantifiable action leaders take against an opposing force. The leader must know what deception is, why it is important to success in a mission, and how it can be practically employed utilizing the on-hand resources of a unit. Once this is understood by all leaders, the Army will have taken a large step toward full integration of deception into the planning process of tactical units.

Perception Management

As distinct as the definition of deception may be, latitude exists within the military doctrine to confuse the term with other, related operations. In fact, a relationship seems to exist between numerous operations, a relationship so interwoven that a question arises: Should deception in fact be considered an umbrella under which numerous operations are defined? If this proves true, then deception could of its own accord be magnified in importance and position in military operations. Additionally, any confusion that may exist over what is truly a deception operation may be squelched, in favor of an allencompassing view of deception.

One operation that may fit in the above category is perception management, defined by Joint Publication 1-02 as "actions that convey and/or deny selected information and indicators to foreign audiences to influence their emotions, motives, and objective reasoning; and to intelligence systems and leaders at all levels to influence official estimates, ultimately resulting in foreign behaviors and official actions favorable to the originator's objectives...perception management combines truth projection, operations security, cover and deception, and psychological operations." This definition appears to place deception in a parallel category, working as part of the perception management process.

When reviewing the joint definition of deception, though, striking similarities to perception management exist that seem to erode the separate nature of the operations. At the Joint level, deception is defined as "actions executed to mislead foreign decision makers, causing them to derive and accept desired appreciations of military capabilities, intentions, operations, or other activities that evoke foreign actions that contribute to the originator's objectives." At least at this level, distinction between terms is difficult, if existent at all.

But, the phrase "convey and/or deny selected information and indicators" that is found in perception management is also common to lower echelon definitions of deception. Falsification of indicators of friendly intentions, capabilities, or dispositions is basic to the planning and use of deception at all levels of the Army. The end state of perception management, although more commonly associated with the Joint rather than tactical level, aligns exactly with the desired endstate of at least one purpose of any view of deception--influencing an adversary's behavior in favor of one's own position. This similarity in definitions can only serve to heighten the confusion that already exists about how one may view deception. The problem is compounded when realizing that as leaders move up in the echelons of the Army, they may take with them views and experiences of their past on how they operated in a given environment.

In comparing the definitions of perception management and deception, simplicity and accuracy could be served if the former were considered not separate from deception, but rather as a vital component of deception operations. Employment of perception management is in essence employment of but one aspect of deception, an attempt to influence the behavior of an adversary by slowing or altering his ability or desire to respond to a given situation. Common language would help to build a continuity that leaders can grow and mature with, and be better equipped to communicate with their future subordinates.

Operational Security (OPSEC)

It is important at this juncture for leaders to understand and appreciate that there is a clear and purposeful linkage between deception and operational security, commonly referred to by the acronym "OPSEC". Although not synonymous by nature, the terms denote operations that can and should be symbiotic when properly applied. In fact, as with perception management, any distinction that may exist between deception and OPSEC may be more applicable to relationship, rather than function.

OPSEC is, according to Field Manual 34-10, <u>Division Intelligence and Electronic</u>

Warfare Operations a "combination of actions taken to deny the enemy information about division forces, operations, capabilities, and intentions."

From the time a soldier enters the military, he or she is taught about the various techniques of employing OPSEC in tactical situations, and such instruction become a form of drill for many units.

Procedures such as signal and communications security, concealment techniques, camouflage, noise and light discipline, and physical evidence controls become a conscious means to enhance survival on a increasingly lethal battlefield. But, these action may have an associated, even focused purpose of intentionally denying the enemy information about friendly capabilities and intentions.

Leaders commonly plan OPSEC procedures in order to identify, control, and protect indicators associated with conducting a wide spectrum of operations, and are primarily directed toward enhancing survivability of friendly forces and protecting their intentions. This focus is widely viewed as the responsibility of all units regardless of echelon, and become a critical aspect of force protection. Because of the Army's emphasis on OPSEC measures, actions such as employment of smoke and obscurants, camouflage, decoys, and dispersion of units have become integral to how Army units fight and sustain. Formal and informal after action reviews and critiques of tactical missions readily note any weakness in this area, as a means of alerting leaders for focus in future training efforts.

As with perception management, though, a closer examination of operational security reveals that OPSEC and deception seem to share a common objective, that being of misleading the enemy decision maker into specific but erroneous perceptions or actions. ²⁴ When OPSEC is employed with precision and expertise, the enemy becomes unable to fully ascertain the posture, intent and disposition of friendly forces. Without use of extraordinary means to obtain intelligence, the enemy commander is kept guessing. This effort at "subjugating the enemy's army without fighting" as espoused by

Sun Tzu is brought to life, and OPSEC becomes a pattern supportive of a planning regime that consistently does what the enemy least expects.²⁵

In this capacity, OPSEC may not be a separate operation from deception, but rather linked directly to deception. It is but another tool a commander can use to deceive an adversary as to intentions and disposition. To place operational security outside the umbrella of deception may deny the potential impact such actions can have on an adversary, especially when these actions are part of a specific plan that targets an enemy commander. OPSEC measures do not have to be elaborate either in their design or execution in order to be extremely effective, especially when considered as part of a larger, more interwoven plan that places deception in the forefront of planning.

Psychological Operations (PSYOPS)

The final area that must be examined in clarifying the definition and use of deception is Psychological Operations, or PSYOPS. This term, originally coined by J.F.C. Fuller in the early 1920s, has taken on special emphasis and interest as technology and world politics evolved from a Cold War mentality. Like many aspects of military operations, PSYOPS involves tactics and techniques peculiar to a specific field, and often pertains to operations that work in apparent obscurity to those individuals functioning in the main battle area. But when reviewing the doctrine on PSYOPS, a common thread seems to surface that once again reinforces a link to a larger, more dominant theme.

PSYOPS, by definition in Field Manual 33-1, <u>Psychological Operations</u> involves "operations intended to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals." PSYOPS personnel, by training and specialty, have capabilities that make them ideally suited to support the planning and execution of deception. In fact, PSYOPS personnel possess special equipment and PSYOPS techniques that can markedly enhance deception operations, whether at strategic, operational, or tactical level. 27 This multiechelon capability,

coupled with a specified acceptance of the role of deception at all levels, further reinforces the necessity for commanders to become familiar with this vital aspect of military planning.

It is at the tactical level that an appreciation of PSYOPS may unfortunately be lost, as the chance of success and the impact of deception operations increases when PSYOPS support the deception. 28 It can be focused on any particular aspect of the battlefield framework (deep, close, rear), and can be either broad or specific in nature. Although generally requiring coordination and permission from echelons above the tactical level, consideration of PSYOPS use should be made whenever mission planning commences. The advantages to its use may outweigh the effort placed into planning and employment, as PSYOPS can directly target the command and control of an adversarial force.

The question to be answered in seeking simplicity and continuity of terms is whether or not Psychological Operations are truly separate and distinct from deception. If PSYOPS is a means of using information to influence an adversary's emotions, motives, and objective reasoning, and by doctrine fully complimentary to deception, then a direct linkage to deception seems apparent. PSYOPS is, from a practical perspective, another technique a commander can use to mislead or influence enemy decisionmakers, causing them to ultimately accept desired appreciations of military capabilities. As such, PSYOPS becomes a component to the larger theme of deception that focuses on gaining an advantage during, before and after the onset of armed hostilities.

A Better Definition?

A fundamental revision of how the military views deception may assist commanders in better understanding and applying deception at the tactical level. No radical change in doctrine is required to accomplish this measure, as deception doctrine is validated by historical precedence and interwoven into numerous military manuals. Rather, leaders would begin to view the concept of deception as the starting point from which various

tasks are directed. This framework provides commanders a focus for planning, an endstate to direct the attention of their staffs in seeking measures to conduct deception.

Ultimately, deception becomes a true "umbrella" under which actions are linked. Operation Security, Psychological Operations, and numerous other activities are then recognized as means to achieve a specific purpose: to mislead or influence the enemy decision maker by applying either distortion, concealment, or some method of presenting a false or desired picture of friendly capabilities. Leaders integrate, synchronize, and employ the various facets of deception much the same way that they are accustomed to employing the Battle Operating Systems (BOS). However, since deception involves all Battle Operating Systems, it must be synchronized just as the non-deceptive elements of the operation.

Thus, the military refines the concept of deception to reflect an overarching operation, directed against the specific adversary commander possessing the authority to initiate actions. The fundamental focus of deception becomes an effort to "hide the real", while simultaneously "showing the false." Within this operation, leaders and staffs plan and coordinate such activities as OPSEC and perception management within the framework of mission analysis. They build in redundancy and periodic assessment into the process to ensure continuity of effort, and conduct reviews to ensure that actions are truly nested with efforts of the higher command.

Before the military can fully integrate deception at any level into the mission analysis framework, leaders must first understand the definition and concept of deception, and recognize it as a tool to manage the various efforts directed by the military to gain an advantage over the enemy. Refining the concept of deception as an "umbrella" facilitates this recognition, and assists commanders in visualizing the use of deception in their tactical plans. From this small step, the military can proceed toward the ultimate goal of successfully incorporating deception at the tactical level of war, and reap the benefits such a goal would provide.

PRECEDENT IN HISTORICAL DOCUMENTS

Considering expanding the role and use of deception at the tactical level may seem pointless were there not some justification for additional emphasis. In seeking such justification, several avenues exist that point to the success of historical deception efforts as potential indicators for application in the future. Within the historically framework, failure to employ deception generally centered around an impression among military leaders that deception was too risky to attempt, or in some cases a violation of a perceived norm of decency in war.³⁰ However, leaders should logically have considered the use of deception in war as a rational, necessary activity because it serves as a force multiplier. This force multiplier acts to either magnify the strength of the successful deceiver, or lessen the combat power of the adversary. Therefore, forgoing the use of deception in war is tantamount to undermining one's own strength. Deception would allow a military to use its force more economically by achieving victory at a lower cost and with fewer casualties.³¹

In fact, much of the current U.S. doctrine pertaining to deception is founded in the merits of plans and operations of forces that successfully employed deception in past conflicts. From World War II on, numerous decisive victories weighed heavily on the ability of commanders to deceive adversaries. Calculating risk and effort, commanders sought and gained a distinct advantage over the enemy by incorporating deception into the very fabric of their tactical and operational planning, and in doing so established a precedent for modern planners and commanders to study and follow.

Out of the violence and confusion of World War II came specific cases where deception was successfully employed. Over the next fifty years of conflict, in many parts of the globe, other instances emerged where the success or failure of a mission hinged on the insight of commanders to employ deceptive measures to mislead an enemy force.

Certainly numerous factors played into the overall successful execution of these missions, and each situation differed from the others by time, force, and circumstances. But the fact that leaders recognized the importance of deception, even at the tactical level, should serve notice to current planners that deception may be more than a secondary or desperate measure. It is a vital part of the overall scheme of planning.

Researchers studying historical instances of deception should not construe such examples as definitive guidance on execution of future missions. However, given the evolution in warfare over the past 50 years, a simple appreciation of the role and implementation of deception in past conflicts will provide a general bearing for leaders to follow when considering planning and conduct of operations. This appreciation may make as much difference in the outcome of future conflict as it did in several noteworthy efforts dating from World War II to the present.

World War II

Until the close of World War I, deception was less than a formal process; rather, it could best be recognized as an ad hoc means by individual commanders functioning at the lower tactical and operational levels. However, the Second World War changed this process, revising deception to be an integral part of organized staff work. The often mentioned studies surrounding Allied use of ULTRA showed that deception planning, linked to critical intelligence on enemy activities, greatly facilitated strategic deception efforts in World War II. Strategists recognized ULTRA's role as vital to this effort, providing "real-time access to the most closely guarded plans, perceptions, wishes, and fears of the Germans."

The U.S. Army gained significant advantage during the war as a result of planning and implementing tactical as well as operational and strategic deception. In September 1944, the 43d Cavalry Reconnaissance Squadron (Reinforced) occupied a 23-mile front on the left flank of XX (US) Corps on the Metz Front. This squadron arrayed its forces in a fashion and utilized deception so effectively that the Germans actually believed the 14th

(US) Armored Division(AD), rather than the Cavalry Squadron, was in the area.

Unknown to the Germans, though, the 14th AD was not even in Europe at the time.

Execution of deception, along with expertise in deception operations, proved critical to U.S. success. 34

British use of deception in World War II included the establishment of a phantom army in an attempt to counter a numerical disadvantage against Italian forces in Egypt. This phantom army, organized by British Commander-in-Chief in the Middle East General Sir Archibald Wavell, operated against the flanks of Italian forces in support of the British main effort. The Italian Army, perceiving a much larger British force than actually existed, was forced to build isolated fortified positions to strengthen their flanks. Employing various methods of camouflage and concealment, the phantom army's success in deceiving the Italian force facilitated full concentration of actual British forces. This resulted in two British Divisions initially defeating ten Italian Divisions, and ultimately led to decisive victory against the Italians. Wavell recognized the importance of deception as a combat multiplier, and effectively employed it as a means of achieving overwhelming success despite the lack of numerical advantage.

Another noted case of Allied deception planning in World War II lead to what was possible "the single greatest victory of the Red Army over the Germans in the war." Begun on 22 June 1944, the operation dubbed "Bagration" resulted in the destruction of the German Army Group Center and the reconquest of Byelorussia. Deception played a significant role in Operation Bagration, and became a model for future Soviet planners in the implementation and sustainment of what is known as "maskirovka" in the Soviet military doctrine. Such measures continue to influence the mindset of military leaders worldwide, and demonstrates the timelessness and value of deception.

To achieve success against the Army Group Center, the Red Army devised a plan incorporating deception at all echelons in an attempt to present the German High Command with the picture that the Red Army was intending to launch an attack in the

Ukraine rather than Byelorussia. Additionally, they created the picture that the attack would commence in July rather than early in the summer. This posturing was enhanced by tactical and operational deception techniques such as false minefields, communications security, and operational security that limited the individuals aware of the deception to only a select group of planners. Additional measures included use of cover of darkness to execute troop movements, false troop and tank concentrations, and strict control of deception efforts at all levels. Thus, those involved in execution of orders believe that their efforts represented what was to actually occur.

The eventual attack by the Red Army against the Germans ultimately determined the success of deception measures. The Red Army's attack against Army Group Center led to the destruction of 28 German divisions, the loss of 350,000 German soldiers, and the Third Reich being pushed out of Russia. This overwhelming victory was enhanced by a synchronized strategic, operational, and tactical deception plan that clearly targeted a specific enemy commander, and in fact may have been key to the victory. Relatively small measures such as operational and communications security were placed under the larger deception umbrella, contributing to a successful effort to mislead the German High Command as to intent and posture of the Red Army.

The remarkable successes of ULTRA, U.S. deception measures, British use of a phantom army, and Operation Bagration in World War II may provide key lessons for today's planners about tactical deception and how critical it is to operations. First, neither the U.S., British, or the Red Army seemed to view deception as a tool specific only to strategic or operational level. These Armies planned deception throughout the military echelons, and carefully synchronized the effort to support the deception story. Rehearsals and coordination made this effort easier to control, but execution occurred at the lowest level.

Second, these armies did not view techniques intended to mislead the enemy as separate, distinct operations. Whether conducting communications deception, emplacing

decoys, or concealing rehearsal sites, deception was the overarching goal out of which all efforts focused. These efforts were integral to the base plans, and tied directly to the scheme of maneuver. The intent of military operations were clear: conduct deception in order to mislead the enemy, thereby facilitating combat operations.

Finally, military efforts identified and directed deception toward specific enemy commanders, individuals who possessed the authority to influence future enemy actions. Leaders viewed deception not as a passive but rather active measure, orchestrated to achieve the greatest perception of reality. The armies sustained their respective deception efforts even during the conduct of the actual battle, so as to continue to mislead the enemy until revelation of the plan would be of little or no consequence. The results of their efforts are history, but the process used to plan and execute deception should live on in current day planning.

If deception measures achieved such noted success in World War II, logic may dictate that deception integration would become the yardstick for conducting future planning. The historical lessons of World War II, open for military leaders worldwide to view and assimilate, would surely become ingrained as significant pieces of any military effort. Although the efforts and benefits of such operations as Bagration were not lost on all military leaders, sufficient operations occurred over the subsequent 30-40 years without evident use of deception integration to raise the issue as to why leaders apparently ceased such efforts. If today's leaders could determine and understand the rational for this, then perhaps these leaders could proceed in taking the decisive step of shaping a lasting incorporation of deception at the tactical level.

Post-World War II

The years following World War II saw a change in U.S. attitude toward deception.

Although convinced that deception was an important factor in successes during WWII, the U.S. put deception secondary to the changes in the military brought about by the Cold War. The nuclear Age and the implications of Atomic delivery took precedent, and the

apparent demise of deception priority presided throughout the Korean and Vietnam Wars. Other than focusing deception on hiding of nuclear delivery systems and decoy sites, U.S. forces conducted little tactical deception. Counterinsurgency became the norm until the 1980s.⁴⁰

However, for other nations involved in conflict during this era, deception held strong as a viable means of supporting, and even ensuring, success. In the Israeli-Egyptian War of 1967, Israel used a deception similar to the Normandy Invasion, utilizing a buildup of landing craft as if preparing for amphibious operations. Additionally, Israel put dummy tanks on its southern flank and lined up its forces as if they were going to move south towards the Gulf of Aqaba. But, the Israelis actually pushed north and west rather than south, maintaining strict COMSEC procedures and even infiltrating the Egyptian radio net. This element of surprise assisted significantly in the war being over in 6 days. 41

Following their 1967 defeat by Israel, Egypt planned the onset of the Yom Kippur War with two specific goals. First, Egypt intended to surprise the Israelis through a joint Egyptian-Syrian attack, and allow the Egyptian army an opportunity to breach the Bar Lev line too quickly for Israel to reinforce with use of reserves. The second goal, then, was to establish a defense against any Israeli counterattack. The aspect of Israeli's timely commitment of the reserve was critical, as this could be implemented only if Israel received advanced warning of an impending attack from Egypt. It is in Egypt's early planning phases that tactical deception became an important factor for any hope of success, and through this planning a concept developed to effectively implement surprise and deceit that targeted the Israeli leadership.

From the outset, the Egyptians implemented a carefully orchestrated deception plan designed to delude the Israelis into believing that the Egyptian Armed Forces were unprepared for war and were merely conducting a routine training exercise. Egyptian military forces began routine scheduled maneuvers as a precursor to the eventual attack, while Syrian forces moved into positions suited for future offensive operations across

Israel's northern border. Reinforcing this effort was Egypt's operational security decision to compartmentalize by time and information the number of commanders aware of the date of the attack. Egypt provided to the news media false reports that outlined Anwar Sadat being ill and requiring treatment in Europe. Additionally, Egypt worked diligently to portray a picture of normalcy, scheduling sailboat races involving the Egyptian Navy and other naval officers.44

Egypt sustained the training of forces as a means to advance troops closer to the Arab-Israel border. Once at the border, Egyptian troops assumed concealed positions along the Suez Canal, and remained in place until time for the attack to commence. Additionally, as a final measure to ensure continuity of the deception plan, additional Egyptian soldiers took positions along the Canal dressed as fishermen. The Egyptian deception plan was a comprehensive effort, integrating strategic, operational, and tactical movements from the President to the individual soldier, all designed to fool the Israelis until they discovered the Egyptian's intent too late. 45

Egyptian deception operations, along with Israeli miscalculations, effectively masked the Arab's intent long enough for them to gain initial advantages on the battlefield of 1973, advantages that ultimately led to a political victory over Israel. ⁴⁶ Carefully planned operational and communications security measures, coupled with information management, worked together to create a military picture that masked Egypt's intent and deceived Israel as to Egypt's military posture. Out of the Yom Kippur War came an important lesson for military planners: surprise remains a decisive factor in attaining success, and with meticulous planning and execution can be attained even in spite of modern electronic and other surveillance. ⁴⁷

Possibly the single most noted case of U.S. deception during Vietnam involved operations by the 1st Infantry Division engaged in a series of small battles and ambushes around the provincial capital of An Loc near the Cambodian border. In one particular incident, A Troop, 1/4 Cavalry, of the Divisional Cavalry Squadron, had been ambushed

on the road to Loc Ninh by a Viet Cong regiment. General Depuy, utilizing an apparent security leak on the staff of the Province Chief, ensured that the Province Chief and his staff were informed in advance of a move of what was described as a similar-sized force on the road to Minh Thanh a few days later. However, this force was in actuality much larger than the ambushed force, and would be supported by additional combat forces positioned near the Loc Ninh road. 48

The use of deception as an integral part of a plan to trap an unwary enemy was a key element in U.S. reaction forces successfully closing with the Viet Cong Regiment, killing at least 239 enemy soldiers. This success, although portraying an isolated instance of deception use by U.S. forces in Vietnam, worked hand-in-hand with the success of Israeli-Egyptian deception efforts to create a receptive environment for use of deception in the post-Vietnam era. Deception, as in the World War II era, would once again become a focus for discussion and planning, and prove key to future successes in battle.

Post-Vietnam to Present

Deception successes in World War II and the Vietnam era provided a background for evaluation of operations after Vietnam, where implementation or lack of implementation of deception weighed heavily on the success of numerous operations. In Operation Just Cause, deception clearly supported the need for operational and tactical surprise through use of various troop and air maneuvers prior to the invasion in order to determine enemy responses and desensitize them to U.S. procedures, procedures that would ultimately result in the invasion of Panama. However, the shortcoming in fully inculcating deception and thus achieving surprise contributed to the overall failure of Task Force Ranger in Somalia, an unsuccessful attempt to seize General Aideed, leader of the Somali National Alliance. 50

It was in 1990 that a coordinated deception plan in Desert Storm kept Iraqi commanders constantly guessing the status and intention of coalition forces. ⁵¹ In utilizing deception to convince Iraq that the main attack would be into Kuwait from

Saudi Arabia, small units were left behind after the renowned move of VII Corps to the west, in order to simulate actions of the larger units. Task Force Troy, a 460-man Marine phantom division deployed south of Kuwait, used tank and artillery decoys and loudspeakers blaring tank noises across a 30-kilometer front. The unit never had more than five tanks, but by constantly moving and firing from various decoy positions, it created the illusion of a much larger armored force. This effort was tied to Marine amphibious rehearsals off the coast in the Persian Gulf.

In fact, an essential part of the preparations for the ground war phase of Desert Storm was to disorient and confuse the enemy by any and every means. This process resulted in the planning of fake amphibious operations, conducting special operations behind enemy lines, and deliberately leaking misinformation to the media that outlined numerous maneuver options picked upon by Iraqi Intelligence. This added dimension of using the media to indirectly support or enhance deception procedures will be a topic of discussion for years to come, as instant communications becomes more assessable to the most remote of battlefields.

Deception efforts in Desert Storm proved key to a successful Coalition war effort, one focused on reducing risk to Coalition forces, effectively utilizing technological capabilities, and preserving U.S. options while inhibiting or eliminating enemy options. Additionally, deception was ultimately a critical factor in keeping a significant number of Iraqi forward units and tactical and operational reserves out of the ground war Desert Storm is one of numerous desert operations in history where deception has been successfully used to mislead enemy commanders.

According to Michael Handel, author of <u>War</u>, <u>Strategy and Intelligence</u>, one can evaluate the effectiveness of deception in two ways: either before and during a military operation, or after the operation has taken place. ⁵⁶ In recent years, as the Cold War became a memory, additional information has surfaced that demonstrates how significant a role deception played in the overall Soviet strategy. Their belief in and use of

deception may be an indicator of the effort future adversaries may make toward successful deception.

As modeled under Operation Bagration, the Soviet's deception effort of Maskirovka was designed to deceive adversary intelligence and key decision makers. It was a coordinated effort of concealment, camouflage, simulation, and disinformation which combined security and deception. Maskirovka encompassed the most fundamental measures at the small unit level, but increased in complexity at the upper echelons. Ultimately, the Soviet aim was directed at eight basic tasks:

- 1) mask force strength from enemy reconnaissance,
- 2) change external appearance of objects,
- 3) establish dummy positions and establish feints,
- 4) spread false rumors (misinformation),
- 5) sound discipline and artificial noises,
- 6) mask operations of radios by setting up dummy radio nets,
- 7) accustom enemy to particular patterns of behavior,
- 8) confuse enemy expectations so that he fails to find correct response to them. ⁵⁷
 This model for deception is not unlike that used by OPFOR in both simulation and
 Combat Training Centers today, and should serve notice to participants of the significant role that deception plays on the modern battlefield, and potentially would have played in a U.S.-Soviet conflict.

For example, the World Class Opposing Forces (WCOPFOR) of the Battle Command Training Program (BCTP), incorporates deception measures into virtually every facet of battle. In a report entitled "Deception and the World-Class Opposing Force", News From The Front, Jan-Feb 96, OPFOR deception is outlined as a planned, coordinated, and synchronized effort. It begins at the onset of analysis of the situation, continuing through formulation of the course of action, to the completion of the battle or engagement. The reason the WCOPFOR employs deceptive measures, besides a doctrinal application of

the principle, is their belief that the cornerstone to any successful operation is deceiving the enemy commander by doing the unexpected. Even with the vast number of reconnaissance systems available to U.S. Commanders, the WCOPFOR believes it can achieve operational and tactical surprise through hiding true WCOPFOR dispositions. ⁵⁸

At the Joint Readiness Training Center (JRTC), BLUEFOR commanders learn through experience that deception works for either force, but it must be credible. Deception is especially effective when units believe their perceptions and not evaluate the information available. As a testimony to the effectiveness of deception, one Commander wrote of his CTC experience "We really have the OPFOR fooled when we show them a believable look and then do something a bit different. (We need not be wildly different—we are not trained for that.) Energetic, aggressive execution to standard will create some deception... If we have the initiative, the OPFOR is already guessing. We can help him guess wrong."59

Regardless of location or setting, several common trends exist in current day deception thinking. First, deception cannot replace the other military factors required for success in war, such as synchronizing fires or identification of decisive points. Believing otherwise courts military disaster. The most ingenious ploy is useless if not backed by military power or properly exploited. 60

Second, since no effective measures to either detect or prevent deception have yet to be devised, deception has a great chance for success. There is little risk involved in planning deception, and the benefit of such planning easily outweighs the cost of the effort.⁶¹ But, without good intelligence, properly used, planning and execution of deception is virtually impossible. The deception plan, to be effective, must be built around accurate and timely knowledge of what the adversary is thinking.⁶² The necessity for effective mission analysis seems obvious.

With relatively little cost or expenditure of manpower leaders could inculcate deception as an integral part of operational and tactical doctrine. Key would be top-

down priority, with deception taught down at least to the battalion level to ensure that tactical level units can both support and enhance operational deceptive efforts in the field. However, the military must ensure that leaders at all levels understand deception, and teach the role of deception to subordinates. Put simply, military leaders must be made aware of deception's value and potential. 64

Finally, and possibly most important, planning and coordination are the critical phases in deception operations when key decisions are made that will affect the entire operation. The commander and G3 have to make these decisions based upon accurate and timely information, while taking into account METT-T. Without detailed planning based on accurate data and full coordination of deception, the chance of failure is high.

If historical accounts lend credence to the importance of deception, then leaders in today's military must seek means and opportunities to use the umbrella of deception to gain an advantage over the enemy during the planning phase. Although difficult to quantify in numerical terms, the implementation of deception has certainly saved countless lives by setting conditions for successful employment of combat systems, systems that could have been compromised had enemy forces not been mislead as to friendly intentions or posture. History provides substance and rational for leaders to consider actions that provide for full incorporation of deception at all levels.

IMPLEMENTING DECEPTION

As stated in previous chapters, implementing deception at any level of operations, especially tactical level, should not imply a dramatic shift or change in current doctrine. Rather, implementation should reflect a mindset on the part of commanders and planners that deception is an integral part of the planning process consisting of complimentary components working in concert to mislead enemy forces. Such a mindset begins with a clear understanding of the definition and utility of deception, and becomes solidified through an appreciation of the historical examples of successful deception operations. With this understanding, commanders and planners can verbalize a simple but clear desired tactical endstate, derived from a planning process that integrates deception in accordance with current doctrine. Leaders can facilitate this process and enhance deception effectiveness by focusing on three key points.

First, the process of integration should be flexible in order to adapt to the changing technology of Force XXI and Information Operations that will place a greater premium on not only misleading the enemy but protecting the friendly force as well. This flexibility implies a resistance to rigidity and checklists, but a thoroughness that will foster growth for the future.

Second, deception integration should be applicable to levels below division, while aligning with the deception intent of higher headquarters. The military should tailor a standard planning process that meets the needs of units at all echelons, without compromising or eliminating planning steps in place under current doctrine.

Finally, the process of integration should provide for a simplicity in structure that prevents taxing of austere planning staffs working to execute the process, while maintaining clarity that facilitates both understanding and execution. Such streamlining should not be construed as something less than thorough, but rather understanding of the requirements already placed on young leaders striving to accomplish assigned missions.

Thus, commanders and planners should approach a tactical mission with the aim of mission accomplishment assisted by a deception process that fully compliments the intended aim and objective of the commander. They should view deception as an extension of the established mission analysis process, linked to the purpose and intent of the higher headquarters. This aspect answers the "what" of deception integration, that is, seeking the ultimate goal for deception. The "how" part of deception become the critical part, and the part that truly launches into the "decisive step."

Proposed Format to Use

In researching the "how" of deception integration, The Army Research Institute (ARI) published a report in 1990 that sought to fill a perceived doctrinal gap on the process of deception and provide specific approaches to manipulate the enemy planning process with deception, recognizing that deception can serve as a powerful force multiplier for engaging a numerically superior opposing force. In reviewing this problem, ARI viewed deception planning as a process of solving five key problems. These problems are:

- 1) Determining how friendly forces (FFOR) want opposing forces (OPFOR) to act.
- 2) Understanding what perceived situation would cause the OPFOR commander to act in the specified desirable way.
- 3) Determining what information and intelligence, and from what sources, would get the OPFOR commander to perceive the battlefield situation in the desired way.
- 4) Understanding how to manipulate the intelligence data collected by the OPFOR to cause the OPFOR commander to get the desired information and intelligence from the necessary sources.
- 5) Determining how to use the resources available to the FFOR to manipulate the data as desired.

This ARI study, derived from analyzing the OPFOR planning cycle at the Combat Training Centers, presented deception as a methodical and deliberate analysis of both enemy and friendly capabilities. One did not exist without the other, as friendly success

implied a thorough appreciation of not only what the OPFOR wanted to accomplish, but also how FFOR could directly influence their intentions. Although conducted in 1990, this technique for beginning the deception process retains a valid position today, and one that could serve a planner well in the early stages of mission analysis.

Seemingly validating the ARI study was a report published in 1995 by the Center for Army Lessons Learned (CALL), outlining an assessment from the Battle Command Training Program (BCTP) that presented a similar view of analyzing deception. This report called for planners to consider early in the mission-planning (estimate) process the use of functions like OPSEC, jamming, and deception. The BCTP report proposes five questions for analysis of deception, questions that parallel current doctrine.

ВСТР	FM 90-2 PROCESS
a. What does the	
enemy expect us to do?	Situation Analysis
b. What do we want	
the enemy to believe we	
are doing?	Deception Objective
c. What can we do to	
convince the enemy to	
believe our deception	
plan?	Desired Perception
d. Can we use an	
alternate course of action	
as our deception plan?	Deception Story
e. How can our	
reconnaissance/counter-reconnaissance efforts	
assist the deception	
plan?	Deception Plan

FIGURE 2, DECEPTION CONSIDERATIONS IN THE MISSION ANALYSIS PROCESS

As shown in Figure 2, these five questions serve as a starting point for the ultimate goal of implementing deception at the tactical level. By considering the aforementioned questions, complimentary planning steps could then be incorporated into the current format of mission analysis as outlined in Field Manual 101-5. These planning steps, as proposed by the ARI, would be aligned with specific data requirements at each step, explaining not only what is to be done, but how to accomplish the given step. 67

PLANNING STEP	DATA REQUIREMENT
1) Evaluate situation	Desired, current situation data
2) Establish goals	Desired actions
3) ID deception target	Focus goals on OPFOR decision cycle,
	organization
4) Define desired perception	OPFOR behavioral vulnerabilities
5) Develop deception target	OPFOR communication and
	processing structure
6) Create story	Deception means
7) Identify constraints	OCOKA
8) Analyze timing	OPFOR channel timing data
9) Define/revise plan	General plan templates
10) Evaluate consistency	Past and present FFOR behavior
11) Establish verifiability	Intelligence capabilities
12) Integrate with operations plan	PIR, NAI
13) Execute and monitor.	

FIGURE 3, DECEPTION PLANNING AND DATA REQUIREMENTS

Leaders should understand that this process is not specific to one staff member, but a concerted effort on the part of all planners. As with the mission analysis process outlined in Field Manual 101-5, Staff Organization and Operations, planning is a function of communications and coordination among every member of the planning staff, in order to fully assess both friendly and enemy capabilities. The staff, with guidance from the commander, utilizes the above planning steps to create an operations order that is not exclusive of deception, but places it in its proper perspective as a critical combat multiplier. All facets of the umbrella of deception, from OPSEC to PSYOPS, are considered, and incorporated as deemed necessary into the order.

The overarching theme of the deception planning process is insurance and quality control of tactical deception planning. The implementation of this process would work to ensure that this effort effectively accomplishes specific goals. These goals align with those stated in the Military Deception Program outlined in Air Force Instruction 10-704, attesting to the broad utility of deception throughout the services. ⁶⁹ The specified goals of deception planning at the tactical level would include:

- 1) Support higher headquarters deception plans.
- 2) Enable commanders to achieve surprise, enhance security, and seize initiative by misleading enemy commanders through defeat or confusion of his C2 capabilities. This would result in the enemy commander making decisions that were useless to his effort.
- 3) Condition enemy commanders to expect false procedures, capabilities, limitations, and tactics.
- 4) Target the enemy commander or individual with decision-making authority.
- 5) Enhance combat effectiveness.
- 6) Integrate deception with operational security (OPSEC), psychological operations (PSYOP), electronic warfare (EW), Information Operations (IO) and destruction of enemy capabilities.

The endstate of this planning process would be an operations order that provides the critical information and directives for execution of the deception process, fully nested with the Commander's Intent, while maintaining the standard 5-paragraph tactical order format (See Appendix A). Key elements as shown in Figure 4 are addressed in the body of the operations order, with specific deception tasks assigned as needed to subunits in Paragraph 3b/c. Brevity and clarity remain the rule, and tasks assigned with consideration of available assets and time.

1) enemy situation	Paragraph 1aEnemy Situation
2) targeted decision-maker	tt n
3) friendly situation.	Paragraph 1bFriendly Situation
	Paragraph 1cAttach & Det
4) desired perception.	Paragraph 3CDR's Intent
5) desired situation.	na
6) desired action.	Paragraph 3aConcept of the Operations

FIGURE 4, FORMAT FOR INTEGRATING DECEPTION IN THE OPERATIONS ORDER With the operations order linked to a planning process that inculcates deception as an integral part of the mission, executing deception becomes as significant as any action taken on the battlefield. ⁷⁰ The tools of deception will evolve with changing technology, but the basis for their use remains soundly rooted in the military planning process, not likely to disappear with the passing of time.

Present Implications

As stated in the previous section, the actual techniques for employing deception will undoubtedly evolve over time, and potentially magnify in importance as technology for detection and surveillance improves for both friendly and enemy forces. However, units below division currently possess numerous capabilities for deception, limited only by the initiative and imagination of the commander and planners of the unit. Efforts do not

have to be elaborate to be effective; rather, any effort need simply to be tied to the overall plan, synchronized with the scheme of maneuver, and periodically assessed for effectiveness.

Assessment from the BCTP Warfighters Exercise (WFX) shows that units could have remarkable success in deception by utilizing such traditional measures as:

- 1) build dummy positions to lure enemy reconnaissance teams in and then destroy them,
- 2) resource the deception force to accomplish its mission.
- 3) reflag units to hide unit boundaries.
- 4) send false radio traffic.
- 5) use smoke, engineers, mockups, PSYOP to support the deception. 71

These measures, coupled with operational security measures such as camouflage, radio discipline, and noise and light discipline, can be extremely effective in presenting a desired picture to an enemy commander, while at the same time shaping the actual plan to be executed.

But in addition to these traditional measures, commanders should also consider the latest assets at their disposal that can greatly enhance any deception plan. With the advent of Force XXI and Army After Next technology, commanders and planners will face new challenges in effectively employing deception. It is within this realm that the concept of Information Operations enters, defined by Field Manual 100-6, Information Operations as "continuous military operations within the Military Information Environment (MIE) that enable, enhance, and protect the friendly forces' ability to collect, process, and act on information to achieve an advantage across the full spectrum of military operations." This concept places deception in a new light, particularly when viewed from the perspective of Command and Control Warfare (C2W).

C2W is defined under Field Manual 100-6 as:

...the warfighting application of Information Warfare in military operations, intended to influence, deny information to, degrade, or destroy adversary C2 capabilities while

protecting one's own C2 capabilities against such actions. Comprised of two disciplines, C2 attack and C2-protect, the overarching theme is a full integration of Psychological Operations, deception, OPSEC, and Electronic warfare to facilitate the application of appropriate systems and forces to execute information Operations. ⁷³

Rather than assume a lesser role, deception planning becomes even more crucial as new technology expands the capabilities of the fighting force to influence and mislead the enemy.

However, under C2W, the deception planner has a broader focus for actions, requiring a thorough understanding of both enemy and friendly capabilities. Under C2 Attack, the planner must consider:

- 1) denial of information to the enemy by disrupting his observation, degrading his orientation and decision formulation, and degrading information collection.
- 2) manipulating enemy perception causing disorientation of his decision cycle.
- 3) selectively disrupting C4I systems.
- 4) neutralizing or destroying enemy information collection by physical destruction of nodes and links.⁷⁴

In short, the commander must realize the nature of today's Military Information

Environment, and actively seek to disrupt the information cycle of an opposing force

With C2 Protect, the effort shifts to protecting one's own information process from

intervention by an adversary. Included in this process is the consideration of:

- 1) gaining C2 superiority.
- 2) disrupting the adversary's decision cycle.
- 3) reducing the adversary's ability to conduct C2-attack.
- 4) reducing friendly C2 vulnerabilities.
- 5) deconflicting and coordinating one's own C2 systems. 75

The commander must determine, utilizing the deception planning process, how the adversary can employ destruction, EW, military deception, OPSEC, and PSYOP to disrupt his C2 systems and decision-making process. This cannot effectively occur

without a planning system that is routinely accustomed to assessing enemy intentions and friendly vulnerabilities. The effectiveness of tomorrow's systems may be determined by the systems in place today.

Today's military, operating under the concept of Force XXI, must understand the implications of the modern battlefield, and the critical role deception planning plays in execution of tactical missions. Commanders must protect friendly information systems from a myriad of threats, while denying the enemy use of his systems. Full-dimensional information operations must be fully integrated into the planning, preparation, and rehearsal for every operation. As such, commanders must be personally involved in determining the vital role all aspects of information operations can play in the successful execution of military operations both in war and OOTW. It is only through this effort that today's military can effectively employ forces to counter the potential threats it may face.

Future Implications

As commanders adjust to fighting on today's battlefield, the implications for tomorrow's battlefield looms on the horizon. Waging and winning war in the information age will take much more than just hardware and software. It demands new thinking for a new era in both science and art. The new science is found in information processing, the ability to pass data efficiently and in real-time as required. The realities of digitization technology take hold and become a distinct asset, but by itself it is not enough. The new art is in how to process and use the vast amounts of information so the commander can translate it into decisive victory. 77

In fact, the battlefield of tomorrow as viewed by the Army's Training and Doctrine Command (TRADOC) possesses astounding capabilities and challenges for commanders. TRADOC Pamphlet 525-66, Future Operational Capability, outlines requirements to fulfill the plans of Force XXI. Included in these requirements are:

- 1) sensors to detect, identify, accurately locate, and schematically map an adversary's C2 nodes in order to maximize counter C2 operations that exploit, deceive, damage, or destroy the adversary's C2 system.
- 2) C4I systems that survive to operate under nearly all weather conditions, on dirty battlefields, and despite enemy jamming efforts,
- 3) Systems that provide warning of unauthorized penetration,
- 4) Friendly C4I systems that facilitate seamless, real time information exchange providing warfighters with the information they require regardless of echelon, physical location, or security level. ⁷⁸

Digitization of the battlefield, which consists of processors and digital communications all using common formats, will permit a common view of the battlefield which allows for situational awareness, synchronization of battlefield activities, and command and control on the move. Within this digitalized environment, commanders must be prepared to address key issues that focus on how innovative they are in the implementation of the new technology, while not losing the essence of the building blocks of military planning. Additionally, commanders must remember that it is soldiers, not equipment, that implement deception. As such, risks must be weighed against advantages of any action taken.

One key issue for commanders is determining how to effectively train soldiers in the use of the new technology, as well as in the process of deception. The military school system can provide the basics, but it will ultimately be up to the units to hone the skills of the soldiers. The tactics and techniques of deception must be integrated into all training exercises and simulations, so that familiarization with the systems is assured down to the lowest level. As new literature and doctrinal manuals arrive in the inventory, leaders should strive to read and understand what is being presented, and determine what implications the manuals may have for the unit's operating procedures. By doing these

measures, the leaders and their soldiers can keep up-to-date with the material on deception, and not be overwhelmed with new ideas.

Second, commanders must kindle a mindset among their staffs that deception is not to be given simply a cursory examination or consideration in the formulation of plans. Practice in staff exercises will assist in solidifying the process into the unit's standard operating procedures, but any skills derived from these exercises are perishable and will degrade if not reinforced with additional training and periodic review. A careful study of history will reinforce the importance of deception, and keep deception in the proper perspective.

Third, the Army must assess how use of new technology will enhance operations without overloading a commander's ability to assimilate information. Considerations at the tactical level may include:

- 1) accessing aerial platforms (such as UAVs) to not only gain information on enemy disposition, but also protect friendly information by feeding a false picture to enemy collection assets as to the friendly disposition.
- 2) utilizing signal nodes to transmit a false picture of either friendly force structure, disposition and intent, or both, while simultaneously being able to monitor enemy transmissions to assess receipt of transmissions.
- 3) use of decoys that not only present a visible image (form, heat, etc.), but also emit sounds that simulate an actual vehicle in operation.
- 4) human reconnaissance trained and equipped to detect and interdict key enemy C4I nodes prior to initiation of operations.
- 5) use of camouflage to conceal specific operations, while highlighting aspects of the battlefield for possible detection by enemy reconnaissance.
- 6) use of scents (olfactory) to portray a picture of force presence in an area conducive to friendly operations.

7) interdiction of enemy digital assets (computers, etc.) to either transmit misinformation, or cause disruption of these assets at critical points in time.

This list is not meant to be all inclusive, nor imply accessibility to such capabilities at all levels, but should serve as an example of what commander and planners should be considering when incorporating deception into the tactical plan.

Finally, commanders must be open to new ideas on how deception can be implemented in specific situations. Advances in technology require innovative approaches in order for deception to be fully effective. As seen from the historical examples cited in this paper, virtually any tactical situation lends itself to deception, if commanders and planners are willing to exert the energy and dedicate the resources to ensure success of the effort.

Although the future of warfare will certainly bring about new and exciting technology that will enhance a unit's capabilities, leaders should remember and appreciate a sobering concept. Technology is not partisan, and serves whatever master holds the capability. As such, friends and foes alike are sure to seek the advantages that possession of digitalization and 21st Century advances in warfare can bring. Yet, the fundamentals of deception are ingrained in history, and it is those fundamentals that may have the greatest impact on future events. Leaders must therefore be ever mindful of their responsibility to gain the greatest advantage over the enemy prior to combat regardless of available technology, so as to afford their soldiers the greatest chance for survival. Technology can assist, but careful, deliberate deception planning remains the most effective method of ensuring that units are truly prepared to engage the enemy of the future.

CONCLUSION AND RECOMMENDATIONS

The lessons of history and the environment of future battle require today's commanders and planners to learn and appreciate deception and the critical role it plays in operations. The time has come to consider deception as vital an operation as any single aspect of military execution. The current version of Field Manual 90-2, Battlefield Deception is outdated and inadequate in addressing the needs of the future. The 1997 version of Field Manual 101-5, Staff Organization and Operations fails to clearly articulate deception planning as applicable to both tactical and operational echelons. Field Manual 100-6, Information Operations establishes the importance of nested deception in future planning, but like Field Manual 101-5 falls short of outlining the detailed integration of deception at the tactical level.

Thus, there is currently no single accurate source for tactical level planners to seek in determining their needs and capabilities for deception. What sources that do exist are vague or dated at best, and fail to integrate deception within the framework of the mission analysis and tactical operations order. The result is that leaders are left with improvising a structure and format for deception planning, a process that invites discontinuity of effort and potential compromise of mission accomplishment.

If the military is to successfully nest tactical deception with operational and strategic planning, it must embrace the view that deception is truly an umbrella that covers the myriad of operations discussed under the current concept of Information Operations. Deception planning should not be viewed as applicable only to Corps and above, but rather linked by necessity throughout all military echelons and fully integrated into the mission analysis process and the tactical operations order. Deception is not inherently difficult or nebulous, and is certainly appropriate from a historical and utility perspective for consideration and implementation by tactical level units.

With this in mind, the military should consider the following recommendations:

- 1) Revise the current edition of Field Manual 90-2, with greater emphasis on the tactical level. Incorporate the advances of Force XXI and Information Operations as means for accomplishing deception.
- 2) Integrate planning steps of deception as outlined in this monograph into the mission analysis process, and subsequently the tactical operations order as formatted under Field Manual 101-5. De-emphasize the use of a separate deception annex, but rather reinforce the process as integral to the base plan.
- 3) Encourage teaching institutions to place more of a focus on instructing the historical examples of successful deception operations in history. Bagration and Desert Storm are but two of a myriad of operations that owe success to the implementation of deception.
- 4) Teach deception in the institutions as an integral part of the mission analysis process. Use OPFOR models as a tool to demonstrate how deception enhances success on the battlefield.
- 5) Review the various tactical and joint publications with an eye toward refining the definition of deception. Consider the possibility of placing OPEC and Perception Management as components of deception, with a future look toward placing PSYOPS and associated operations in the same framework.

If these measures were to be implemented, deception would become as vital a component of military operations as any single aspect of current warfare. It is versatile, functioning in both war as well as stability operations and support operations. It is timeless, transcending the ages of warfare at least since the writings of Sun Tzu. And, deception is both appropriate and necessary for future operations. The military can and must take the "decisive step" in advancing deception planning and execution forward alongside the technology that will take the Army into the 21st Century.

ANNEX A 5-PARAGRAPH OPERATIONS ORDER, REFLECTING PROPOSED INTEGRATION OF DECEPTION PLANNING

1. SITUATION:

- a. Enemy Forces: (Include enemy vulnerabilities to deception, such as intelligence collection capabilities, personality traits of commander, etc. Additionally, identify targeted decision maker.)
- b. Friendly Forces: (Include deception intent of higher headquarters, current resources and capabilities to direct and assess deception efforts toward the enemy, established trends for operations which could imply friendly intent, etc.)
 - c. Attachment and detachments: (Include specific units attached to assist in deception efforts)
 - d. Commander's Evaluation: (Include assessment of potential for success in deception operations)

2. MISSION.

Intent: (Concise statement of desired situation as deception is executed, desired perception, and its linkage to the endstate of the operation.)

- a. Concept of Operations: (Include desired actions for deception (Tasks and Purposes) for units specified in Concept. Mention any units tasked with deception actions critical to success of the effort.)
- b/c. Tasks to Subordinate/CSS units: (Include specific tasks/purposes that support deception effort. Additionally, ID deception annex, if utilized)
 - d. Coordinating Instructions: (Include specific deception measures not included in previous paragraphs.)
- 4. Service Support: (Include specific support requirements for deception effort)
- 5. Command and Signal: (Include ID of deception radio nets and nodes, call signs, etc.)

NOTE: Use Deception annex only if necessary, and then only to clarify tasks not covered in order. Specific deception measures should be discussed in respective annexes, as necessary.

ENDNOTES

- ¹Sun Tzu. <u>The Art of War</u>, translated by Ralph D. Sawyer. (Boulder: Westview Press, 1994), 136.
- ²Michael Handel. <u>Strategic and Operational Deception in World War II</u>. (London: Frank Cass, 1987), 2.
- ³Field Manual 101-5. <u>Staff Organization and Operations</u>. (Washington, DC: HQ, Department of the Army, 1997), B-2 and H-69.
- ⁴Field Manual 90-2. <u>Battlefield Deception</u>. (Washington, DC: HQ, Department of the Army, 1988), iii.
- ⁵Jack Spencer. "Deception Integration in the U.S. Army". (Fort Leavenworth: United States Army Command and General Staff College MMAS, 1990), 2.
 - ⁶Field Manual 90-2. <u>Battlefield Deception</u>, 1-2.
- 7"Deceiving the Opposing Force: A Program of Theoretical and Applied Research to Aid the Deception Planner." (Technical Report 910, Army Research Institute, September 1990), 2.
- ⁸Michael Handel. <u>War, Strategy, and Intelligence</u> (London: Frank Cass, 1989), 343.
 - ⁹Field Manual 101-5. <u>Staff Organization and Operations</u>, 5-9.
- ¹⁰Field Manual 90-24. <u>Multi-service Procedures For Command, Control, and Communications Countermeasures</u>. (Washington, DC: HQ, Department of the Army, 1991, Internet Access, Webcrawler Search Engine, HTML Document), Chapter 1.
- ¹¹Carl von Clausewitz. On War, edited and translated by Michael Howard and Peter Paret. (Princeton: Princeton University Press, 1984), 202.
- ¹²Websters. <u>New World Dictionary, Third College Edition</u>. (New York: Simon & Schuster, Inc., Publishers, 1988), s.v. "deceive."
 - ¹³Field Manual 90-2. <u>Battlefield Deception</u>, 1-2.

¹⁴Joint Chiefs of Staff, Department of Defense Publication No. 1-02. <u>Dictionary of Military and Associated Terms</u>. (Washington, D.C.: U.S. Government Printing Office, 23 March 1994), s.v. "deception."

¹⁵Christopher Bellamy. <u>The Evolution of Modern Land Warfare</u> (London: Routledge, 1990), 29.

16Field Manual 90-2. Battlefield Deception, 1-2.

¹⁷Field Manual 101-5-1. <u>Operational Terms and Symbols</u>. (Final Draft) (Washington, DC: HQ, Department of the Army, 1997), s.v. "deception." Note that the 1997 final draft of Field Manual 100-5, <u>Operations</u> (not approved as of this writing), discusses two of three "domains" as physical and informational, and may provide a common reference between the two manuals in viewing deception means.

¹⁸Joint Chiefs of Staff, Department of Defense Publication No. 1-02. <u>Dictionary of Military and Associated Terms</u>, s.v. "deception means."

¹⁹Ibid, s.v. "perception management."

20 Ibid, s.v. "deception."

²¹Field Manual 90-2. <u>Battlefield Deception</u>, 1-2.

²²Field Manual 34-10. <u>Division Intelligence and Electronic Warfare Operations</u>. (Washington, DC: HQ, Department of the Army, 1986), 4-15.

²³Field Manual 100-8 - <u>The Army In Multinational Operations</u> (Washington, DC: HQ, Department of the Army, Internet Access, Webcrawler Search Engine, HTML Document, undated), Chapter 5.

²⁴Field Manual 90-24, <u>Multi-service Procedures For Command, Control, and Communications Countermeasures</u>. (Washington, DC: HQ, Department of the Army, 1991, Internet Access, Webcrawler Search Engine, HTML Document), Chapter 1.

²⁵Sun Tzu, 92.

²⁶Field Manual 33-1. <u>Psychological Operations</u>. (Washington, DC: HQ, Department of the Army, 1993), Glossary 10.

²⁷Ibid, 3-3.

28_{Ibid}

²⁹Bellamy. The Evolution of Modern Land Warfare, 29.

- ³⁰Handel. <u>War, Strategy, and Intelligence</u>, 332.
- ³¹Ibid, 310.
- ³²Handel. Strategic and Operational Deception in World War II, 20.
- ³³Ibid, 22.
- ³⁴"Maneuver". Center for Army Lessons Learned (CALL) Newsletter No. 8-90. (Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas), no page number.
 - ³⁵Handel. <u>Strategic and Operational Deception in World War II</u>, 15-18.
- ³⁶"Red Army Deception: The Destruction of the German Army Group Center (Operation Bagration, 22 June 29 August 1944)", Center for Army Lessons Learned (CALL) Newsletter No. 3-88, Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas), no page number.
 - ³⁷Handel. Strategic and Operational Deception in World War II, 178.
 - ³⁸Ibid, 220-221.
 - ³⁹Ibid, 227-231.
- ⁴⁰William A. Meier, "Deception: Here to Stay". (Naval War College, 16 June 1995), 9-10.
- ⁴¹James R. Peterson, "Tactical Deception-Vital Then, Vital Now". (Air Command and Staff College, Student Report Number 87-1985, 1987), 8-9.
- ⁴²Larry H. Addington, <u>The Patterns of War Since the Eighteenth Century</u>. (Indiana: Indiana University Press, 1994), 304.
- ⁴³George W. Gawrych, "The 1973 Arab-Israeli War: The Albatross of Decisive Victory", <u>Leavenworth Papers Number 21</u>. (Combined Studies Institute, U.S. Army Command and General Staff College, 1996), 24.
 - 44 Ibid.
 - 45Ibid, 25.
 - 46 Ibid, 6.

- ⁴⁷Christopher Bellamy, <u>The Future of Land Warfare</u>. (New York: St. Martin's Press, 1987), 19.
- ⁴⁸"Doctrine". Center for Army Lessons Learned (CALL) Newsletter No. 3-88. (Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas), no page number.
- ⁴⁹Thomas Donnelly, Margaret Roth and Caleb Baker. <u>Operation Just Cause</u> (New York: Lexington Books, 1991), 49.
- ⁵⁰Daniel P. Bolger, <u>Savage Peace: Americans at War in the 1990s.</u> (Novoto, CA: Presidio Press, 1995), 314.
- ⁵¹Les Aspen and William Dickinson. <u>Defense for a New Era: Lessons of the Persian Gulf War.</u> (New York: Brassey's, 1992), 13.
 - 52_{Ibid.}
- ⁵³Phillip M. Taylor, <u>War and the Media: Propaganda and Persuasion in the Gulf War.</u> (New York: Manchester University Press, 1992), 235.
- ⁵⁴Douglas V. Smith, "Military Deception and Operational Art". (Naval War College, 14 May 1992), 18-19.
 - ⁵⁵Aspen and William Dickinson, 13.
 - ⁵⁶Handel. War, Strategy, and Intelligence, 419.
 - ⁵⁷Handel. <u>Strategic and Operational Deception in World War II</u>, 190.
- ⁵⁸"Deception and the World-Class Opposing Force". News From The Front, Jan-Feb 96. (Center For Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas), no page number.
- ⁵⁹"JRTC Observation", <u>CALL Training Quarterly List, Training Quarterly 4th Quarter, FY 97</u>. (Center for Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas), no page number.
 - ⁶⁰Handel. War, Strategy, and Intelligence, 342.
 - ⁶¹Ibid, 340.
 - 62_{Ibid.} 341.
 - 63Smith, 22.

⁶⁴Diane H.Olson, "Deception: Past, Present, and Future Possibilities." (Naval War College, 9 March 1994), 27-29.

65"Doing Deception: Attacking the Enemy's Decision Processes", Research Report 1550. (Department of the Army, U.S. Army Research Institute For the Behavioral and Social Sciences, February, 1990), 1.

66"Brigade Perceptions: BCTP Warfighters (WFX) and Seminars". <u>Combat Training Center (CTC) Quarterly Bulletin, 2d Quarter, FY 95</u>. (Center for Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas), no page number.

67"Doing Deception: Attacking the Enemy's Decision Processes", 25-29.

⁶⁸Field Manual 101-5, 5-5.

⁶⁹Air Force Instruction 10-704, <u>Military Deception Program</u>. (Washington, DC, Secretary of the Air Force, 25 March 1994), 1.

⁷⁰"Doing Deception: Attacking the Enemy's Decision Processes", 25-29.

71"Brigade Perceptions: BCTP Warfighters (WFX) and Seminars", no page number.

⁷²Field Manual 100-6. <u>Information Operations</u>. (Washington, DC: HQ, Department of the Army, 1996), 2-3.

73_{Ibid. 2-4.}

⁷⁴Ibid. 3-1 to 3-5.

75_{Ibid.}

⁷⁶TRADOC Pamphlet 525-5, <u>Force XXI Operations</u>. (Fort Monroe, Virginia: Department of the Army, Headquarters, United States Army Training and Doctrine Command, 1 August 1994), 3-5.

⁷⁷Peter A. Kind, "The Information Age". <u>The IMA ViewPoint</u>, Vol 5, No. 4, Summer/Fall 1994.

⁷⁸TRADOC Pamphlet 525-66, <u>Future Operational Capability</u>. (Fort Monroe, Virginia: Department of the Army, Headquarters, United States Army Training and Doctrine Command, 1 December 1995), Chapter 2.

79Closely linked to the changes being implemented by the Force XXI is the ongoing developments of Information Warfare and Command and Control Warfare being led by the Land Information Warfare Activity (LIWA). Activated in 1994, LIWA operates under the Intelligence and Security Command (INSCOM) at Fort Belvoir, Virginia, and is tasked by the Department of the Army to deploy field support teams to land component and separate Army commands to facilitate planning and execution of Information Operations. For additional information see "Land Information Warfare Activity", Army Reprogramming Analysis Team Bulletin, Volume 4 (Unclassified). (Fort Belvoir, Virginia, Internet Access (Secure),@www.arat.army.smil.mil/ARAT/bulletin/Volume 4/liwa.html, HTML Document), 1.

SELECTED BIBLIOGRAPHY

Books

- Addington, Larry H. The Patterns of War Since the Eighteenth Century. Indiana: Indiana University Press, 1994.
- Aspin, Les and William Dickinson. <u>Defense for a New Era: Lessons of the Persian Gulf War.</u> New York: Brassey's, 1992.
- Bellamy, Chris. <u>The Future of Land Warfare</u>. New York: St. Martin's Press, 1987.
- The Evolution of Modern Land Warfare. London: Routledge, 1990.
- Bolger, Daniel P. <u>Savage Peace: Americans at War in the 1990s</u>. Novoto, CA: Presidio Press, 1995.
- Clausewitz, Carl von. On War, edited and translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984.
- Cruickshank, Charles. <u>Deception in World War II</u>. New York: Oxford University Press, 1980.
- Dewar, Michael. The Art of Deception in Warfare. Somerset: David and Charles, 1989.
- Donnelly, Thomas, Margaret Roth and Caleb Baker. <u>Operation Just Cause New York:</u> Lexington Books, 1991.
- Dunnigan, James F. and Albert A. Nofi. <u>Victory and Deceit: Dirty Tricks at War.</u> New York: William Morrow and Company, 1995.
- Feer, Fred. <u>Tactical Deception at the National Training Center</u>. Santa Monica: Rand Corporation, 1989.
- Handel, Michael. Strategic and Operational Deception in World War II. London: Frank Cass, 1987.
- . War, Strategy, and Intelligence London: Frank Cass, 1989.
- Liddell Hart. Basil Henry. Strategy. New York: Signet, 1974.
- Mao Tse-Tung. Selected Works. London: Lawrence and Wishart, 1955.

- Sun Tzu. <u>The Art of War</u>, translated by Ralph D. Sawyer. Boulder: Westview Press, 1994.
- Taylor, Phillip M. War and the Media: Propaganda and Persuasion in the Gulf War. New York: Manchester University Press, 1992.
- Websters. New World Dictionary, Third College Edition. New York: Simon & Schuster, Inc., Publishers, 1988.

Manuals

- Air Force Instruction 10-704. <u>Military Deception Program</u> Washington, DC, Secretary of the Air Force, 25 March 1994.
- Field Manual 33-1. <u>Psychological Operations</u>. Washington, DC: HQ, Department of the Army, 1993.
- Field Manual 34-2-1. Reconnaissance and Surveillance and Intelligence Support to Counterreconnaissance. Washington, DC: HQ, Department of the Army, 1991.
- Field Manual 34-10. <u>Division Intelligence and Electronic Warfare Operations</u>. Washington, DC: HQ, Department of the Army, 1986.
- Field Manual 90-2. <u>Battlefield Deception</u>. Washington, DC: HQ, Department of the Army, 1988.
- Field Manual 90-3. <u>Desert Operations</u>. Washington, DC: HQ, Department of the Army, 1993.
- Field Manual 90-24. Multi-service Procedures For Command, Control, and Communications Countermeasures. Washington, DC: HQ, Department of the Army, Internet Access, Webcrawler Search Engine, HTML Document, 1991.
- Field Manual 100-5. Operations. Washington, DC: HQ, Department of the Army, 1993.
- Field Manual 100-6. <u>Information Operations</u>. Washington, DC: HQ, Department of the Army, 1996.
- Field Manual 100-7. <u>Decisive Force: The Army in Theater Operations</u>. Washington, DC: HQ, Department of the Army, 1995.
- Field Manual 100-8. The Army In Multinational Operations Washington, DC: HQ, Department of the Army, Internet Access, Webcrawler Search Engine, HTML Document, undated.

- Field Manual 100-15. <u>Corps Operations</u>. Washington, DC: HQ, Department of the Army, 1996.
- Field Manual 101-5. <u>Staff Organization and Operations</u>. Washington, DC: HQ, Department of the Army, 1997.
- Field Manual 101-5-1. Operational Terms and Symbols. (Final Draft) HQ, Department of the Army, 1997.
- Joint Chiefs of Staff, Department of Defense Publication No. 1-02. <u>Dictionary of Military and Associated Terms</u>. Washington, D.C.: U.S. Government Printing Office, 23 March 1994.
- TRADOC Pamphlet 525-5, <u>Force XXI Operations</u> Fort Monroe, Virginia: Department of the Army, Headquarters, United States Army Training and Doctrine Command, 1 August 1994.
- TRADOC Pamphlet 525-66, <u>Future Operational Capability</u>. Fort Monroe, Virginia: Department of the Army, Headquarters, United States Army Training and Doctrine Command, 1 December 1995.

Periodicals and Articles

- "Brigade Perceptions: BCTP Warfighters (WFX) and Seminars". Combat Training Center (CTC) Quarterly Bulletin, 2d Quarter, FY 95. Center for Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas.
- Center for Army Lessons Learned (CALL) Newsletter No. 97-8, Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas.
- Combat Training Center (CTC) Quarterly Bulletin, 3d Quarter, FY 96. Center for Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas.
- Combat Training Center (CTC) Quarterly Bulletin No. 97-4, Special Edition. Center for Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas.
- "Deceiving the Opposing Force: A Program of Theoretical and Applied Research to Aid the Deception Planner". Technical Report 910, U.S. Army Research Institute For the Behavioral and Social Sciences, September 1990.

- "Deception and the World-Class Opposing Force" News From The Front, Jan-Feb 96. Center For Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Ks.
- Dick, C.J. "Catching NATO Unaware." <u>International Defense Review</u>, January, 1986, 25-26.
- "Doctrine". Center for Army Lessons Learned (CALL) Newsletter No. 3-88, Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas.
- "Doing Deception: Attacking the Enemy's Decision Processes", Research Report 1550, Department of the Army, U.S. Army Research Institute For the Behavioral and Social Sciences, February, 1990.
- "Finding the Enemy Before He Finds You" <u>CALL Training Quarterly List, Training Quarterly 1st Quarter, FY 97</u>. Center for Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas.
- Gawrych, George W. "The 1973 Arab-Israeli War: The Albatross of Decisive Victory", <u>Leavenworth Papers Number 21</u>, Combined Studies Institute, U.S. Army Command and General Staff College, 1996.
- "JRTC Observation", <u>CALL Training Quarterly List</u>, <u>Training Quarterly 4th Quarter</u>, <u>FY 97</u>. Center for Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas.
- Kind, Peter A. "The Information Age". <u>The IMA ViewPoint</u>, Vol 5, No. 4, Summer/Fall 1994.
- "Land Information Warfare Activity", <u>Army Reprogramming Analysis Team Bulletin</u>, <u>Volume 4</u> (Unclassified). Fort Belvoir, Virginia, Internet Access (Secure) @ www.arat.army.smil.mil/ARAT/bulletin/Volume 4/liwa.html, HTML Document.
- "Maneuver." <u>Center for Army Lessons Learned (CALL) Newsletter No. 8-90</u>, Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas.
- TF XXI Experimental Directive for Task Force XXI, Advanced Warfighting Experiment, Experimental Force Coordination Cell, 1 June 1996, Fort Hood, Texas, Department of the Army, Experimental Force (EXFOR) Coordination Cell (ECC), Center for Army Lessons Learned (CALL), Internet Access, CALL Search Engine, HTML Document, Fort Leavenworth, Kansas.
- U.S. Department of Defense, <u>Final Report to Congress: Conduct of the Persian Gulf War.</u> Washington, DC: 1992.

Theses

- Krueger, Daniel W. "Maskirovka--What's in it for Us?" Fort Leavenworth: School of Advanced Military Studies, 1987.
- Meier, William A. "Deception: Here to Stay", Naval War College, 16 June 1995.
- Olson, Diane H., "Deception: Past, Present, and Future Possibilities", 9 March 1994, Naval War College, pp. 27-29.
- Peterson, James R. "Tactical Deception-Vital Then, Vital Now", Air Command and Staff College, Student Report Number 87-1985, 1987.
- Savoie, Thomas A. "Deception at the Operational Level of War". Fort Leavenworth: School of Advanced Military Studies, 1986.
- Smith, Douglas V. "Military Deception and Operational Art". Naval War College, 14 May 1992.
- Spencer, Jack. "Deception Integration in the U.S. Army". Fort Leavenworth: United States Army Command and General Staff College MMAS, 1990.